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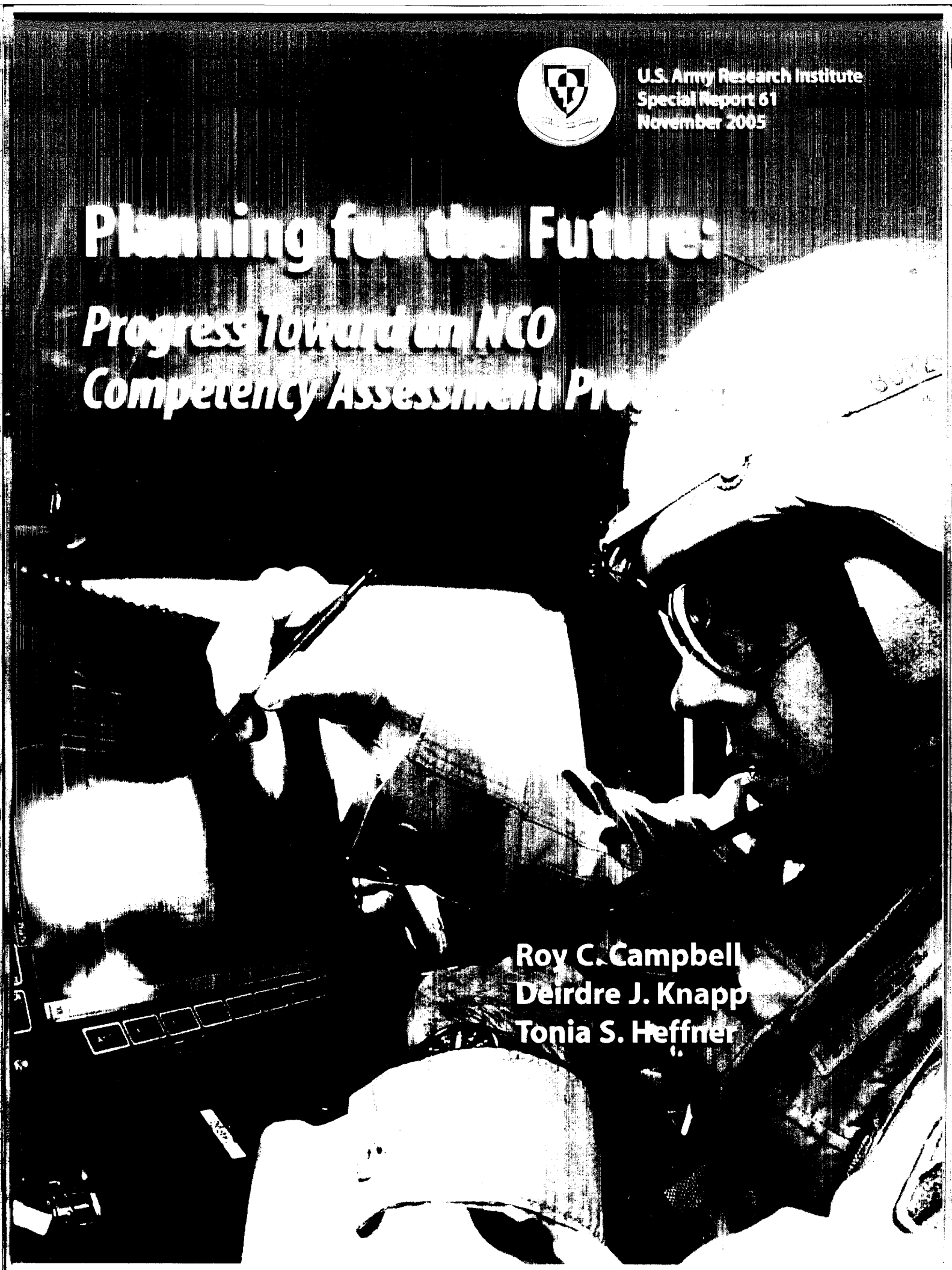
Planning for the Future:

Progress Toward an NCO Competency Assessment Pro



Roy C. Campbell
Deirdre J. Knapp
Tonia S. Heffner

Planning for the Future:
Progress Toward an NCO Competency Assessment Program

Roy C. Campbell
and
Deirdre J. Knapp
Human Resources Research Organization

Tonia S. Heffner
U.S. Army Research Institute
for the Behavioral and Social Sciences

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for the Behavioral and Social Sciences
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Foreword

In April 2002, the Army Training and Leader Development Panel (ATLDP) released the results of its survey of 35,000 noncommissioned officers (NCOs). The ATLDP recommendations included the need for regular assessment of Soldiers' technical, tactical, and leadership skills. The need for regular assessment of Soldiers' skills coincides with a series of research programs on NCO assessment and development executed by the U.S. Army Research Institute for the Behavioral and Social Sciences (ARI). ARI's research programs began with an effort to identify potential knowledge, skills, and attributes (KSAs) for future Soldiers, *Soldier Characteristics of the 21st Century (Soldier 21)*. They continued with an effort to identify and validate potential indicators of the KSAs for use in junior NCO promotion, *Maximizing 21st Century Noncommissioned Officers Performance (NCO21)*. Finally, the research program described in this report provides a three-phase investigation of the issues and possible resolutions for developing a viable Army assessment program that would be linked to NCO promotions. This program is *Performance Measures for 21st Century Soldiers Assessment (PerformM21)*.

Information on PerformM21 was briefed to the Deputy Chief of Staff, Army G-1 on 8 Oct 2003, the Director, Military Personnel Management, Army G-1, on 25 Jan 2004, and Chief, Enlisted Professional Development, Directorate of Military Personnel Management on 13 Nov 2003 and 29 Dec 2004, as well as the Deputy Chief of Staff, Operations and Training, Training and Doctrine Command, on 3 Mar 2005. It was briefed to the Sergeant Major of the Army on 28 Jan 2003 and 30 Mar 2004. It has been briefed quarterly to senior NCO representatives from U.S. Army Training and Doctrine Command (TRADOC), Office of the Sergeant Major of the Army, Office of the Army G-1, U.S. Forces Command (FORSCOM), U.S. Army Reserve (USAR), and the Army National Guard (ARNG) as members of the Army Test Program Advisory Team (ATPAT).

The PerformM21 research program is still in progress. This special report to the field presents a non-technical overview of the current status of the program and outlines the steps yet to be taken. It is intended to inform, stimulate, and invoke discussion and response.

Zita M. Simutis

ZITA M. SIMUTIS
Director and Chief Psychologist
of the United States Army

Acknowledgement

As a group, we are indebted to the Army Test Program Advisory Team (ATPAT), currently chaired by SGM Michael Lamb, Sergeant Major at the Training and Doctrine Command (TRADOC) Deputy Chief of Staff for Operations and Training (DCSOPS&T), and assisted by SGM (R) Gerald Purcell, Office of the Army G-1. The following is a list of the individuals who have served on a volunteer basis as members of the ATPAT since its inception in April 2003. Their willingness to get involved, to contribute time and resources, and to support project goals was, and continues to be, an immeasurable asset to this research effort.

Army Test Program Advisory Team (ATPAT) Members

CSM Cynthia Pritchett, Chair Emeritus
SGM Michael Lamb, Chair
MAJ Chris Keller
SGM Thomas Clark
SGM Fredrick Couch
SGM John T. Cross
SGM Osvaldo Del Hoyo
CSM George D. DeSario
SGM Daniel Dupont
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MSG Monique Ford
MSG (R) Fred Liggett
MSG Matt Northen
1SG Edwin Padilla
MSG Jerome Skeim
MSG Edward Herbert
SFC Kevin Barney
SFC Martha Chavez
SFC Chad McNeish
Mr. Jeff Colimon

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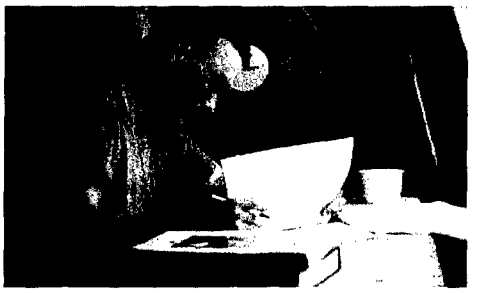
Assessing NCO Skills

What is Assessment?

Assessment is a term that refers to a standardized, systematic, and objective method for evaluating individuals' performance in selected areas. Many would refer to this type of method of evaluating as a "test." In its application, it centers on job performance that can be scored objectively and demonstrates a level of knowledge or skill an individual has in a given area.

Why Do Assessments?



Soldier studying at a desk; self-development is one pillar of the Army training system.

The value of assessment is in measuring and validating knowledge and experience in order to award credit. Assessments can be used to enhance both personnel and training management practices. In the personnel arena, it can help identify who should be promoted and/or who will succeed in a special assignment. In the training arena, it can help validate skills and experiences and/or evaluate training needs and effectiveness. Good assessment leads to good decisions, which leads to an overall increase in organizational performance through a better NCO corps. Testing is not a replacement for development and training, but it does help ensure accountability for those activities. Assessment should drive training only to the extent that both assessment and training are focused on the same critical job requirements.

Like anything else however, not every assessment test is equally good. To be effective, assessments must reflect job requirements and frame questions in a realistic manner that maximizes the relationship between the testing context and on-the-job performance. This can be done and there is overwhelming research evidence that effective testing does improve individual and organizational performance.

The Army has a long history of assessment, beginning with the introduction of group testing during World War I and continuing with the current Armed Services Vocational Aptitude Battery (ASVAB). But what makes assessing NCOs a current topic of interest?

A Mandate from the Field

"Develop and sustain a competency assessment program for evaluating Soldiers' technical and tactical proficiency in the military occupational specialty (MOS) and leadership skills for their rank."

This statement comes not from the Army policymakers but from Soldiers and leaders across the operational spectrum. In 2001, the Army Training and Leader Development Panel (ATLDP) sought input from 35,000 NCOs and their supervisors on a variety of topics to chart the future needs and requirements of the NCO corps. This effort is crucial because it reflects what NCOs see as necessary to enhance and sustain a competent, professional NCO corps to meet current and future demands. Foremost among those requirements was the need for an objective job assessment as additional criterion for the selection of Soldiers to positions of leadership and responsibility.

Endorsed by the Chief of Staff of the Army, the ATLDP findings became the focus of attention for Army Leadership. In 2003, Sergeant Major of the Army (SMA) (R) Jack Tilley outlined a potential competency assessment program that should:*

- Be incorporated into the NCO promotion system
- Be web-based
- Apply to the entire Army (Active Component, Army National Guard, Army Reserve)
- Apply to Specialist/Corporal (E4) through Sergeant First Class (E7)
- Be initially developed as a core assessment, applicable to all Soldiers regardless of military occupational specialty (MOS); MOS-specific competency assessments to be added later
- Include basic NCO history, Army values, leadership, and training subject matter in the common core assessment
- Include situation-based assessments

Part of a Continuing Program

The Army is constantly evaluating and revising its promotion criteria and considerations. ARI and the Army G-1 are investigating changes to the [illegible] promotion system (selection of Soldiers to the grades of E5 and E6) to include the use of performance-based measures as a supplement to the administrative criteria used to determine promotion. This is summarized in the companion ARI Special Report 52 *Selection For Leadership: Transforming NCO Promotion.*

* *The assessment program and SMA Tilley's guidance were briefed to, and endorsed by, SMA Preston in March 2004.*

The Assessment Research Program

To meet the Army's need for job-based measures, the U.S. Army Research Institute for the Behavioral and Social Sciences (ARI) started a 3-year feasibility research program to identify viable approaches for an effective and affordable Soldier assessment system. The work is being conducted in three phases:

- Phase I: Perform a needs analysis and examination of assessment options.
- Phase II: Design and develop a prototype core knowledge assessment.
- Phase III: Examine job-specific measurement alternatives and develop final recommendations for an Army system.

Currently the 3-year ARI research program is about 50% complete, and although it is too early to report results, progress to date has enabled us to develop a vision of what such a program might look like and what the Army would need to include. As of yet, these are initial concepts based on our research – it still remains for Army leaders to approve the elements of the assessment program as well as to make a final decision regarding whether an assessment program will be implemented. However, based on our research, the following design features seem likely:

Soldier working on laptop computer; assessment items are designed with simulation to be realistic.

- The performance assessment system would consist of core assessments (all Soldiers – Army-wide skills and knowledge) plus technical (MOS) assessments, tested separately. Core assessments could be implemented fairly quickly while technical assessments would require a somewhat longer lead time.
- Computer scorable items would be designed to be realistic rather than textbook-like.
- Tests would be administered annually (although individual Soldiers might only have required assessments every three years consistent with the brigade combat team lifecycle, or in conjunction with promotion eligibility). The assessment program would be phased in gradually (e.g., starting with only one or two pay grades). The first assessments would most likely be part of a program pilot and not be for-record.
- Defined windows would be established for test preparation, test taking, and test make-up or retesting. Emphasis would be on maximizing Soldier access to test taking within the defined windows.

- Core assessments would be scheduled and administered on-line or server-based through proctored, Army-sponsored portals.
- Scores would be converted to promotion points and entered into Soldier records. Individual feedback reports would be provided to Soldiers.
- Test preparation guides would be electronically available to Soldiers and would be supplemented by a self-assessment program that refers Soldiers to training and job aids as part of their preparation. A self-assessment program would operate before for-record core assessments were instituted.

Advantages of an Army Job Assessment

- *Provides a new, objective promotion tool to supplement other promotion criteria.*
- *Drives Soldiers to doctrine and reference material.*
- *Rewards Soldiers who out-perform their peers.*
- *Reinforces those subject areas critical to the Army mission.*
- *Adds emphasis and stature to the NCO corps.*
- *Drives development and distribution of up-to-date references and learning materials.*

PERFORMM21: Getting Assessment Right

Instituting an Army wide assessment program is a significant undertaking involving virtually every aspect of Army functions – personnel, training, operations, communications, and computers – and all of the major Army commands. Moreover, competency assessment itself is a complex issue requiring a systematic foundation in job and performance analysis, development of test plans or blueprints, tryouts and validation of items, and specifications for scoring and feedback. The availability of computer-based, computer-administered testing, while affording tremendous new opportunities, also requires new paradigms of test development and administration. Army assessment requires a collusion of many players – test developers, analysts, subject matter experts (SMEs), policymakers, trainers, and systems designers and administrators.

Above all, assessment is a serious and sensitive issue. Leaders and Soldiers must have confidence in their testing system. Confidence comes from knowledge and understanding – failure to communicate all aspects of the system to the user breeds misconceptions and suspicions. A hastily developed assessment system, which has not been thoroughly investigated for flaws and complications, cannot succeed. A competency assessment campaign is just like any commander's battle operation – it must be solidly grounded in expert input, detailed planning, rehearsals, and anticipation of branches and sequels.

Soldiers working on laptop computers; assessment involves many aspects of Army functions – personnel, training and development, operations, communications, and computers.

NCOs in the Expeditionary Army

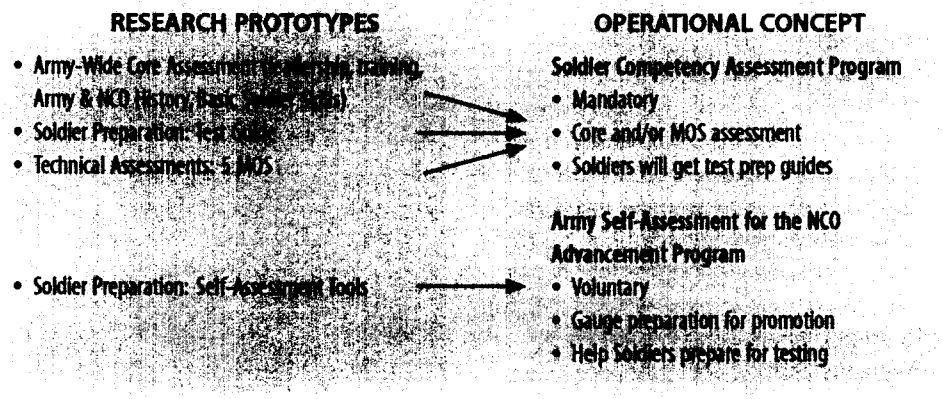
"As we strive to develop flexible, adaptive, competent leaders it is imperative that we have the right tools to identify and prepare Soldiers to perform, lead, and excel in an Expeditionary Army. The Global War on Terrorism here in Afghanistan presents challenges that cause Soldiers to use an array of skills: problem solving, conceptual, communication, tactical and technical, interpersonal, mental, emotional, and team building. They have to be agile, flexible, and adaptive, and have a keen sense of situational and self-awareness. We must find ways to identify and assess potential, and evaluate leadership and performance so that we can teach, coach and mentor them to even higher performance. More than ever, we need to ensure our Soldiers have the capabilities to lead, perform, and excel in an Expeditionary Army."

CSM Cynthia Pritchett
Command Sergeant Major
Headquarters, Combined Forces Command – Afghanistan

Many remember the Army experience with the Skill Qualification Test/Soldier Development Test (SQT/SDT) of the 1980s and early 1990s. Because the lessons learned from SQT/SDT programs are so valuable, a section is devoted to this experience at the end of the report.

The project takes a deliberative approach to researching the foundation of an effective assessment system. An overview of our approach is shown below. The method involves gathering data and information, and identifying and exploring options, but maintaining an eye towards the operational implications. This allows design and testing of an operational system using prototypes to discover pieces that work, as well as potential pitfalls for the operational implementation.

From Research to Operation



As outlined by the diagram, there have been three main concentrations of research.

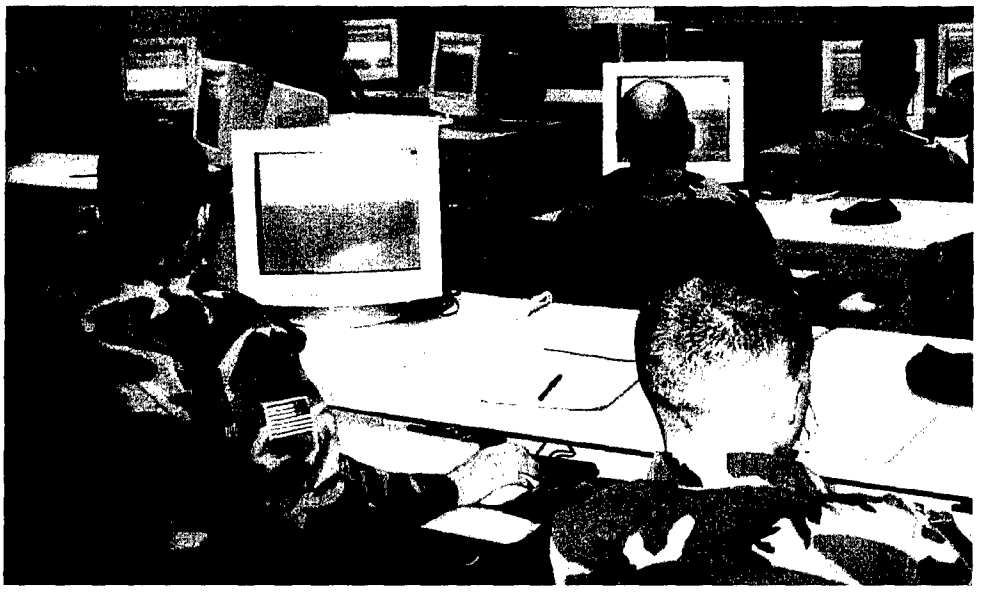
1. Army-Wide Core Assessment
2. Soldier Preparation: Test Guide and Self-Assessment
3. Technical Assessments

The Army-Wide Core Assessment: A Prototype for All Soldiers

In 2004 a prototype test was designed to measure basic soldiering performance and knowledge requirements. Approximately 280 computer-based test items (traditional multiple-choice, matching, ranking, and drag-and-drop) were developed for administration to E4 Soldiers. The content of the test is:

- Common Tasks Skill Level 1 (46%)
- Common Tasks Skill Level 2 (14%)
- Army and NCO History/Army Values (15%)
- NCO Leadership (13%)
- Conduct of Training (12%)

This web-based prototype test was administered to 571 Soldiers in late 2004 using the Army Digital Training Facilities (DTF) computer suites. Analysis of data from these administrations is on-going.



A room of Soldiers taking the prototype competency assessment in the Fort Riley digital training facility.

Although the prototype could serve as the groundwork for an operational assessment, it was developed without a complete and systematic job analysis that would provide the best foundation for such an operational test. A new test blueprint plan, based on incumbent and supervisor survey data, and prioritized and reviewed by knowledgeable training, doctrine, measurement, and policy groups, needs to be prepared to support an operational test. Such a procedure would insure timeliness and relativity in a changed operational climate. The next generation test should also reflect technological capabilities including advanced media and graphics potentials to include sound and motion for more realistic and versatile test item presentations. These capabilities were explored in the MOS technical phase described later in this section.

What Soldiers Think

As part of the prototype Army-wide core measures, we administered a post-test questionnaire and conducted focus group workshops with Soldiers who took the test. There were about 375 participants, all in the grade of E4, representing both Active and Reserve Component units, and from a cross section of combat, combat support, and combat service support jobs. Some results:

- Only about 10% of the Soldiers had used the Digital Training Facility (DTF) before the test but 75% agreed that the DTF was a good facility for testing.
- 73% of the Soldiers had taken computer tests before. When asked to choose between a computer test and a paper-and-pencil test, 91% preferred computer tests.
- Many test items are non-traditional; that is, something other than 4-option multiple-choice questions. Examples include matching, drag and drop, and "select all that apply" responses. Overall, Soldiers liked the non-traditional items. Many responded that it made the test topics more "interesting" and were "different" from typical multiple-choice test items.
- Soldiers were asked two questions about the test content categories: (1) How effective is the test in evaluating proficiency in this area? and (2) How well did you do today on this part of the test? The questions were on a 5-point scale with "very effective – very well" and "effective - well" representing the top two points.

Soldiers who...	*Common Tasks*	*History*	*Leadership*	*Training*	*Values*
Considered test "very effective" or "effective."	*70%*	*69%*	*69%*	*70%*	*75%*
Believed they did "very well" or "well."	*35%*	*32%*	*42%*	*39%*	*60%*

Although Soldiers knew they were taking part in a research project and the test results would not affect them or be reported, proctors perceived that almost all appeared to take the test seriously. Based on the Soldiers' reactions, the demonstration core test was not perceived to be an "easy" test. However, despite concerns about how well they performed, Soldiers did not blame the test. Their appraisal of the effectiveness of the test content was, overall, very positive.

The Criticality of Job Analysis

It is an axiom in the performance measurement field that you don't have to do job analysis for all the assessments being developed – only for the ones you want done right. This applies to both the core assessments (all Soldiers) and to the MOS technical assessments. In its simplest form, job analysis tells you what (content) and how much (weight) to include in the assessment.

Effective job analysis for purposes of assessment measurement should be based on up-to-date and representative survey data from incumbents and supervisors, reflecting all venues in which the job is performed. These survey results then must be analyzed and interpreted by knowledgeable job experts. Final content selection for testing is a combination of all known factors, applied by knowledgeable and experienced reviewers, and policymakers at a high level of authority.

Current Army job analysis is in a varied and inconsistent state. Since the job analysis that is being conducted is not done with an assessment goal, revitalization of the Army job analysis program will likely be a necessary start point for the introduction of an assessment program. Assessments that are not based on an up-to-date job analysis risk being irrelevant to the incumbents and will be seen as outside of the Soldier's job.

Soldier Preparation: Critical to the Mix

Essential to a Soldier assessment program is the concept of Soldier preparation. Soldiers must be given information about what will be expected of them and the tools to help them prepare. For the prototype core assessment, we developed a Test Preparation Guide. This Guide – available both electronically and in hard copy – was used as combination read-ahead, study guide, and test familiarization tool. It includes information about what is covered on the assessment, sample items, and links to relevant study resources (e.g., Soldier Manuals). While pre-pilot test notification problems precluded a full trial of the intended use of the Guide, Soldier reactions to the usefulness of the Guide were highly favorable.

We also have completed a prototype self-assessment system designed to accompany the introduction of an Army assessment program. Such a system would provide individuals with a means to judge their strengths and weaknesses in preparation for promotion and provide opportunities for learning how to study. It would be web-based, accessed through AKO, with links to other related Army sites and sources. The prototype self-assessment system has three components:

- An Information Component that offers specifics about:
  - Testing program goals and eligibility requirements
  - The test environment and test process
  - Test preparation including test-taking strategies (this incorporates features of the Test Preparation Guide described above)
  - Links to a description of the semi-centralized promotion system including an interactive promotion points worksheet (PPW)

- A Knowledge Component consisting of practice items similar to those from the operational test. This would not be a "practice test" because it would not give a predictive score, but it would allow Soldiers to identify test topic areas that are weaknesses for them.
- A Feedback Component consisting of identification of sources or study references. Feedback needs to be specific to the type of item. Straightforward procedural or knowledge items need minimal explanations, primarily just references to the source documents. Leadership, situational, and problem solving exercises, designed to tap Soldier's critical thinking skills, however, need more detailed feedback including reasons and rationales supporting choices, along with principles and doctrine that govern performance. Overall, the goal is drive Soldiers to use training materials and resources that already exist. These materials and resources will be provided as on-line links.

The prototype self-assessment is being designed to meet the immediate needs of the initial Army-wide core assessment. As the assessment system matures, it will be capable of adjustment to include providing MOS-specific information, sample job measures, and promotion status or comparisons with peers within the MOS.

Thoughts on Assessment

"The Army is in dire need for a program that provides accurate feedback to the individual, unit leaders, and institutions. Such a program will permit Soldiers to focus on their individual strengths and weaknesses, provide unit leaders insight into their organization's training posture, and ensure our institutions invest the right time and resources toward the correct individual tasks."

"The ATLDP NCO Study was an eye-opener. It is interesting how a generation of Soldiers who have never been tested outside of our training institutions wants to be able to assess their skills against their peers. One consideration is that this generation grew up testing their skills and knowledge repeatedly in elementary and secondary education. Another is that they want to prove their abilities about knowing their MOS in more ways than just a subjective evaluation by a supervisor. This generation is not leery of tests – they welcome them as a way of certifying their knowledge and value."

SGM Michael T. Lamb
TRADOC Deputy Chief of Staff for Operations and Training

Technical Assessments: A Real-Life Approach

An integral part of the Army assessment program includes obtaining measures of a Soldier's job proficiency – in short, technical testing. Yet this is the most problematic aspect. MOS vary greatly by incumbent size, complexity, performance requirements, training, employment, and environment. Even within MOS, there can be differences in utilization, assignments, equipment, and job tasks. Finally, plans for MOS consolidation and reorganization, the increased use of assignment oriented training (AOT), increased reliance on additional skill identifiers (ASI), and the very nature of Future Force Army structure, indicate the turbulence will continue for the foreseeable future.

Nevertheless, technical assessment is too important to be dismissed as "too hard." One approach is to throw out all the old ideas about technical assessments – mainly that all MOS, and indeed, all Skill Levels within an MOS, need to be treated the same. Since promotion competition is by MOS, not between MOS, no issue of fairness should exist if one MOS has a test and another does not, or if different MOS have different assessment methods, or if different MOS have different assessment designs and cycles. Precedence already exists for requiring or rewarding Army jobs differently as part of the promotion criteria. For example, the Ordnance Corps awards promotion points for civilian certifications.

Soldier entering data: assessment will provide a comprehensive evaluation.

As part of the ongoing research, we investigated prototype options available to assessments in five different MOS:

- 63B Wheeled Vehicle Mechanic
- 91W/68W Health Care Specialist
- 19K Abrams Armor Crewman
- 31B Military Police
- 14E Patriot Fire Control Enhanced Operator/Maintainer

These MOS were selected because they posed representative challenges and opportunities for different assessment methods. The purpose was to explore the assessment possibilities, rather than to develop complete tests. Part of this work involved technological explorations, including computer-based simulations that approximate job conditions without the expense and demands of the typical hands-on evaluation with real equipment. Other potential measures considered include situational assessments, job product evaluations, virtual and constructive simulations, and existing job measures. Discoveries during this research identified a number of approaches that individual MOS could develop as a means of assessment.

Not A Pass or Fail Evaluation

A promotion related assessment compares Soldiers with other similar Soldiers in the promotion pool, not with a preset standard. There is no pass/fail score or "cut" scoring involved. Soldiers who perform much better than their peers would receive up to the maximum promotion points allowed for the assessment factor while those who underperformed compared to their peers would receive fewer promotion points.

Whatever the outcome, the movement towards technical assessments will likely be much slower than that towards an Army core assessment. It is likely that efforts will be initiated individually, by MOS or by Career Fields, rather than on an Army-wide scale involving all MOS. Indeed, some Career Fields have already made an initial move and many more will follow. This independence and distinctiveness in the approach towards technical testing is viewed as a positive. This does not mean that development will be without boundaries or that practices can be instituted without constraint or without coordination. But if individual programs comply with professional testing standards and with Army policy, they can and should differ across jobs.

The Whole Soldier Concept

Competency assessment results would be another tool on which to assess Soldiers' readiness for promotion – but it would not be the sole tool. For the semi-centralized promotion system (promotion to grades E5 and E6), military and civilian education, awards and decorations, and military training (Army Physical Fitness Test and weapons qualification) will continue as weighted factors. Commanders would continue to recommend (or not recommend) Soldiers for promotion and Promotion Board appearances may continue as a requirement. The weight (i.e., points) of a competency assessment test within the overall promotion points worksheet is a policy decision that is yet to be determined.

In the centralized promotion system (to grades E7 and E8), competency assessment results become one more factor available for centralized selection boards to consider. As they do now, boards would continue to receive specific guidance for promotion considerations.

The Army Test Program Advisory Team (ATPAT): The Army's Voice

As indicated, an Army assessment program encompasses many functions and facets. Research and expertise from the testing community can provide some of the answers and identify the design requirements for much of a potential Army program. But an operational program will involve many policy decisions and require organizational and cultural considerations that transcend purely test program-oriented research. To insure that the research and program development can lead to an acceptable, implementable operational program, a special team, the ATPAT, has been in action since April 2003. Composed primarily of Sergeants Major and Master Sergeants representing a wide variety of Army commands and functions, the ATPAT meets quarterly with the research team. Although the specific contributions of the ATPAT are many and varied, the general functions of the team are to:

- Serve as an oversight group providing insights into operational implications and real-world feasibility of an implementable assessment program.
- Provide continuing input and update to the analysis and definition of needs requirements for an Army assessment program.
- Provide product reviews, subject matter expertise, and external assistance and contacts (as needed) in the process of developing prototype measures and trial procedures.
- Serve as a conduit to explain the assessment research program to various Army agencies and constituencies.
- Provide real time feedback on changing conditions and anticipated activities within the Army that affect the assessment program.

ATPAT Members

The ATPAT was established in April 2003 largely through the initiative and recommendations of CSM Cynthia Pritchett, then Command Sergeant Major, U.S. Army Combined Arms Center and Fort Leavenworth. CSM Pritchett served as the ATPAT Chairperson until her reassignment as Command Sergeant Major, Headquarters, Combined Forces Command-Afghanistan. She continues to hold position in the ATPAT as Chair Emeritus.

ATPAT participation varies with commitments, assignments, deployments, and retirements. There have been 46 ATPAT members to date. Even though some members become inactive, we consider ATPAT membership to be permanent, transcending assignments or status.

The current ATPAT Chairperson is SGM Michael T. Lamb, Sergeant Major, Training and Doctrine Command, Deputy Chief of Staff for Operations and Training (TRADOC, DCSOPS & T) Fort Monroe, VA (757-788-5709) michael.lamb@us.army.mil.

The ATPAT generally meets every three months in Arlington, Virginia. Participation in meetings is sponsored by the member's command or agency.

More about the ATPAT

ATPAT members have direct involvement and voice in ARI research. If you would like to learn more about the ATPAT or would like to attend an ATPAT meeting, contact SGM Lamb at the contacts provided above, or Dr. Tonia Heffner, U.S. Army Research Institute for the Behavioral and Social Sciences (ARI), Arlington, VA (703-602-7948) tonia.heffner@hqda.army.mil.

Two Soldiers field training. Well-trained Soldiers make good decisions, which leads to an overall increase in organizational performance through a better NCO corps. Knowledge gained through training and quality of decision making are just two aspects of competency assessment.

Past Army Test Experiences: What We've Learned

Testing for purposes of proficiency measurement is not a new concept in the Army. From the post-Korean War period to about the mid-1970s, NCOs (in grades E5 through E7) took an annual MOS test, both to qualify in their MOS and to draw extra pay for the highest performers. This was followed by the Skill Qualification Test/Soldier Development Test (SQT/SDT) period, which lasted into the early 1990s. The SQT/SDT was very much an evolutionary process – it was many things over a period of time, encompassing written tests, hands-on tests, certifications, and a variety of personnel applications for scoring. Almost everyone's recollection of SQT/SDT differs by when they experienced it.

We have spent considerable time researching the history of promotion testing, particularly the SQT/SDT experiences – both the good and the bad. We have identified some lessons learned to take forward into a new Army testing program. Specifically:

- Minimize the logistical load. SQT/SDT was a completely paper-based, mail-out, and returns system.
- Do the research. SQT/SDT broke a lot of new ground, and very quickly. We know a lot more about large-scale job testing – in all applications – than we did 30 years ago.
- Perceptions count – whether they are accurate or not. Make sure Soldiers, leaders, and commanders understand the program and have a way to get answers to their questions. Actively push information to the field and install programs that maximize individual Soldier contacts.
- Minimize the administrative burden, particularly those functions that require Soldiers and in-house staffing. SQT/SDT was a task-based, high maintenance system relying almost completely on in-house test development expertise, resources and production, plus SME augmentation. Technology, contracting, and new test design strategies can make a difference.
- Recognize testing as one part of the whole Soldier performance system. Testing can enhance accountability and provide both individual and unit measures of performance, but individual assessment testing needs to be a part of a larger Soldier development program – testing is not an end-all in itself.

Some may perceive that the SQT/SDT program was a failure and, from an operational standpoint, the logistical requirements made the program unwieldy. From a testing viewpoint, however, it was a highly successful program. Hundreds of thousands of Soldiers were accurately and consistently measured in critical job performance categories. Low performers were identified and their skills were improved or the Soldiers were removed from the system. Equally as important, high performers were recognized and promoted. Soldiers were provided with specific expectations and leaders had a means of measuring achievement of those expectations. In the end, operational problems, including costs and support requirements, forced almost constant revision in the program, and, ultimately, many of these unresolved factors motivated decision makers to abandon skills testing in the Army. The intrinsic quality and value of the program, however, is still recognized, both inside and outside the Army.

Assessment In the Other Services:

We have spent some time with the other Services – particularly the Air Force and the Navy – examining their promotion testing systems and procedures. We continue this working relationship as a means of exchanging ideas that may have Army applications.

US Air Force – The Air Force administers promotion examinations annually to all Airmen starting at E4 and continuing for promotion to E9. The system (called the Weighted Airman Promotion System – WAPS) tests Airmen with two tests – a Promotion Fitness Examination of common tasks, history, leadership, conduct, and customs and courtesies and a Specialty Knowledge Test that Airmen take in their job specialty. Both tests are knowledge tests and are currently paper-and-pencil-based. Airmen are provided Study Guides and references but all study and preparation is an individual Airman's responsibility; group preparation is prohibited. Test development is centralized at Randolph Air Force Base, TX at a Flight with about 20 military and 35 civilian members permanently assigned. These are augmented on an annual basis by enlisted subject experts who are brought in 30-day temporary duty periods. The Air Force administers about 200,000 tests annually to about 104,000 individual Airmen.

US Navy – The Navy administers promotion tests to all Sailors in grades E4 through E7. Tests are administered twice a year to E4 – E6 Sailors and annually to E7 Sailors. Two tests are administered – a Professional Military Knowledge test consisting of common subjects such as personal safety and damage control, nuclear, biological, and chemical, security, leadership, training, and Navy programs and policies, and an Occupational test which is job-specific. The Navy tests approximately 150 job specialties (ratings) with a different test in each pay grade for each rating. Test development is centralized at the Navy Advancement Center in Pensacola, FL with about 50 personnel assigned permanent party. This is augmented by about 85 enlisted subject experts who, until very recently, were brought into Pensacola on 2-year test writing assignments. The Navy administers about 290,000 tests each year. They test all E4 – E6 Sailors in a 3-hour window on the same day in March and in September and all E7 Sailors on the same day in January. The Navy has recently started prototyping computer testing.

US Marine Corps – Although it is not directly used in the Marine promotion system, the Marine Corps administers an annual test called the Marine Corps Common Skills (MCCS) test. The test is administered to Marines E1 through E7, Warrant Officers W01 and CW02, and Officers O1 through O3. The examination tests general military skills including weapons, tactics, land navigation, nuclear, biological, and chemical, physical fitness, history, leadership, troop information, and close order drill. A hands-on evaluation is provided; however, the for-record test is a knowledge-based examination. A minimum passing score of 80% is required. Marines who fail are mediated; however, the first time result is the score of record. Scores are entered on proficiency markings (E4) and Fitness Reports for E5 Marines and above. Unit test performance is aggregated and commanders can obtain historical test records on individuals. The MCCS comes in paper-and-pencil format. An electronic version, with immediate scoring and feedback, is also available over distance learning (MarineNet) at the Marine Learning Resources Centers. Proponent for the MCCS is the Marine Corps Institute at the Marine Corps Barracks in Washington, DC.

US Coast Guard – The Coast Guard is currently phasing into operation a revised education and qualification program, Enlisted Professional Military Education (E-PME). Under this program all members of 20 rates (the Coast Guard equivalent of MOS) in grades E4, E6, and E8 will be administered the Advancement Qualification Exam (AQE) which covers general military knowledge including seamanship, first aid, survival, customs and courtesies, leadership and supervision, small arms, and security. All members must complete a series of rating-specific hands-on performance qualification tasks and members in grades E4 and E5 also must pass a rating specific correspondence course. Members who meet all other eligibility requirements and satisfactorily complete the E-PME and qualification requirements may participate in the Service Wide Exam for advancement. The Coast Guard publishes official study guides as part of the E-PME as well as a checklist of all performance and knowledge requirements for each pay grade. Members are encouraged to study collectively and there is local study in the unit. Test development is centralized at three Training Centers in Petaluma, CA, Cape May, NJ, and Yorktown, VA. Subject matter experts assigned to the Training Centers on 3-4 year tours develop the tests as part of their duty assignment. The Advancement Branch of the Personnel Service Center administers the tests.

What Happens Next?
The Short Term Outlook – The Long Term Vision

NCO using on-board computer; assessment helps ensure accountability and meeting performance standards.

The PerformM21 project is in progress and much work remains to be done. The first 18 months of the project have been very productive in demonstrating both what is needed and what can be done in the area of an Army core promotion assessment. Consistent with the "Research to Operation" concept shown on page 5, the time is fast approaching for this aspect of the assessment to be handed over to Army leadership for implementation decisions. Meanwhile, the second half of the project should see concentrated efforts in the following areas:

- Continuation of ATPAT meetings on a quarterly basis to provide up to date field and user input.
- Development of a cost analysis of various implementation options along with the identification of potential benefits criteria.
- Review and incorporation of operational requirements and lessons learned from Iraq, Afghanistan, and the Global War on Terrorism as a basis of recreating the test blueprint for the Army core assessment.
- Refinement of the specifications for technology and system requirements to support Army-wide computer-based testing.
- Exploration of alternatives in MOS assessment to include:
  - Candidate jobs for full prototype development.
  - Testing methods and enhancements through technology and low-cost simulation.
  - Situational judgment and decision-making testing.
  - Approaches for skill level implementation and job coverage.
  - Job analysis and test content definition strategies.

One Army

From the outset, an operational principle of the Army's new assessment program has been that it include, at the start, all eligible Soldiers, including AC as well as RC (US Army Reserve and Army National Guard). All Soldiers will take the same test and encounter the same requirements.

This does not mean that there would be a single program or that there would be just one path to implementation. The RC is different in many ways and preliminary planning is addressing the operational implications of inclusion, while still recognizing and working with the unique factors affecting the RC.

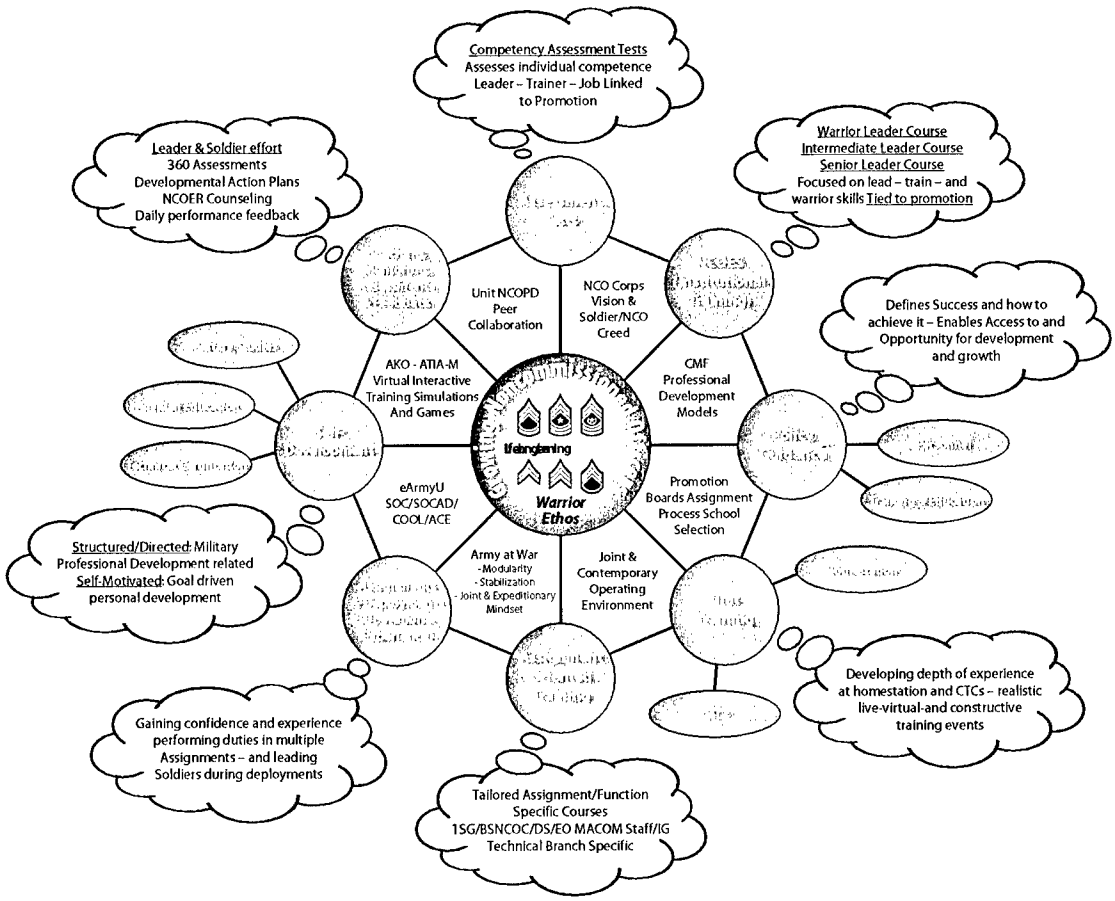
"We must insure that the USAR and the ARNG are included in the planning and given adequate time to react to the implementation of a testing program, to integrate the requirements into our training schedules, and to conduct the preparation and testing within our operational schedules. What the Active Component can do in a very short period of time is magnified by two or three due to the characteristics of the Reserve Components. It is something we can live with, but it needs recognition and planning."

"Conversely, this is a program that USAR might take the lead on in implementation, rather than waiting to follow the practices of the AC. Our recent experiences with mobilizations and deployments within the USAR have caused concern about readiness in some of the Soldier and Leadership skill sets. This test program could boost both the emphasis and accountability of performance requirements that are critical to the USAR mission."

CSM Nick Piacentini
United States Army Reserve Command (USARC)

The closing point of our long-term vision is best made by referring to the work performed by a small group of senior NCOs who have done some serious thinking about the future of the NCO corps. Called "A Concept for Growing the 21st Century NCO Corps," this model of development is shown below. Like all concepts, this is emerging, subject to frequent updating, and does not emulate recent doctrine or policy. But it does stimulate thinking and demonstrates the need for long-term goals. It is critical for readers to comprehend the theme of changing requirements and career development paths for NCOs depicted in the model. All the elements portrayed in the NCO Development Model are crucial for NCO growth and Army success; no one element is intrinsically more important than another. Promotion testing is one of those elements and the focus of our work. But it is important not to view assessment testing as disconnected, divergent, or an option. Like all the other pieces, it helps make up the whole that is the NCO, and the Army of the future – a future that has already begun.

NCO Development Model



Acronyms (clockwise from top)

NCOES = Noncommissioned Officer Education System; CMF = Career Management Field; CTC = Combat Training Center; 1SG = First Sergeant; BSNCOC = Battle Staff Noncommissioned Officer Course; DS = Drill Sergeant; EO = Equal Opportunity; MACOM = Major Command; IG = Inspector General; eArmyU = electronic Army University; SOC = Servicemembers Opportunity Colleges; SOCAD = Servicemembers Opportunity Colleges Army Degrees; COOL = Credentialing Opportunities On-Line; ACES = Army Continuing Education System; AKO = Army Knowledge Online; ATIA-M = Army Training Information Architecture – Migrated; NCOER = Noncommissioned Officer Evaluation Report; NCOPD = Noncommissioned Officer Professional Development.

Your Turn: Feedback?

This research program is important to decisions the Army may make that affect Soldiers in the future. Equally important is that you get a chance to be heard. Comments and reactions are welcomed. Please take the time to let us know your thoughts by sending them to ARI, as follows:

Mail:

Dr. Tonia Heffner
DAPE-ARI-RS
2511 Jefferson Davis Highway
Arlington, VA 22202-3926

Email:

tonia.heffner@hqda.army.mil

USAR Soldier completing the competency assessment in a digital training facility.

Costs of an Army Assessment Program

No change comes without a price tag, and costs are not always dollars and cents issues. Some associated testing requirements:

- An Army infrastructure to support testing is required.
- Soldiers will need time and resources to prepare for testing and to test.
- Personnel and promotion policies will have to be changed; Soldiers will need to adjust.
- Accurate, up-to-date study materials must be made available.

An Army at War

When the initial interest in Army job testing was generated in 2002, the operational commitments and priorities of the Army were far different than what exists in 2005. Is testing a viable concept for an Army at war? The answer is YES. Testing drives rapid dissemination of Lessons Learned and tasks derived from combat experiences. And, if anything, the demands of increased operational tempo highlight the requirement to promote first those who are best qualified to advance to the NCO ranks.

Without doubt, increased operational commitments and deployments involve special testing issues that must be addressed. Wartime demands may alter the schedule for advancing and adopting the Soldier assessment program, but competency assessment is a long-term program focused on meeting challenges and providing for the continuing betterment of the NCO corps. Development needs to advance even when priorities are concentrated elsewhere – the program needs to be ready when the Army is ready.

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14. ABSTRACT *(Maximum 200 words)*:

In the early 1990s, the Department of the Army abandoned its Skill Qualification Test (SQT) program due primarily to maintenance, development, and administration costs. This left a void in the Army's capabilities for assessing job performance qualification. To meet this need, the U.S. Army Research Institute for the Behavioral and Social Sciences (ARI) instituted a 3-year program of feasibility research related to development of a Soldier assessment system that is both effective and affordable. The PerformM21 program has two mutually supporting tracks. The first focuses on the design of a testing program and identification of issues related to its implementation. The second track is a demonstration of concept – starting with a prototype core assessment targeted to all Soldiers eligible for promotion to Sergeant, followed by job-specific prototype assessments for several Military Occupational Specialties (MOS). This report describes the PerformM21 feasibility research program, which is now at the end of the second year of its 3-year plan.

15. SUBJECT TERMS

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